I will use this moment on the floor to plug that cause with all of my colleagues who may be listening from their offices. We must, for the sake of all the folks that have suffered so long from this pandemic, look at how we are going to provide a robust provider network for mental healthcare.

As we head into the Memorial Day weekend, I am so gratified and pleased with the work we have done on a bipartisan basis to produce this package of bills and that we have preserved the spirit of the committee.

Madam Speaker, I urge my colleagues to pass H.R. 2441, and I yield back the balance of my time.

The SPEAKER pro tempore. The question is on the motion offered by the gentleman from California (Mr. TAKANO) that the House suspend the rules and pass the bill, H.R. 2441.

The question was taken.

The SPEAKER pro tempore. In the opinion of the Chair, two-thirds being in the affirmative, the ayes have it.

Mr. ROSENDALE. Madam Speaker, on that I demand the yeas and nays.

The SPEAKER pro tempore. Pursuant to section 3(s) of House Resolution 8, the yeas and nays are ordered.

Pursuant to clause 8 of rule XX, further proceedings on this motion are postponed.

## COASTAL AND OCEAN ACIDIFICA-TION STRESSORS AND THREATS RESEARCH ACT OF 2021

Ms. BONAMICI. Madam Speaker, I move to suspend the rules and pass the bill (H.R. 1447) to amend the Federal Ocean Acidification Research and Monitoring Act of 2009 to establish an Ocean Acidification Advisory Board, to expand and improve the research on Ocean Acidification and Coastal Acidification, to establish and maintain a data archive system for Ocean Acidification data and Coastal Acidification data, and for other purposes, as amend-

The Clerk read the title of the bill. The text of the bill is as follows:

## H.R. 1447

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

## SECTION 1. SHORT TITLE.

This Act may be cited as the "Coastal and Ocean Acidification Stressors and Threats Research Act of 2021" or the "COAST Research Act of 2021".

## SEC. 2. PURPOSES.

- (a) IN GENERAL.—Section 12402(a) of the Federal Ocean Acidification Research and Monitoring Act of 2009 (33 U.S.C. 3701(a)) is amended-
  - (1) in paragraph (1)—
- (A) in the matter preceding subparagraph (A), by striking "development and coordination" and inserting "coordination and implementation":
- (B) in subparagraph (A), by striking "acidification on marine organisms" and inserting "acidification and coastal acidification on marine organisms"; and
- (C) in subparagraph (B), by striking "establish" and all that follows through the semicolon and inserting "maintain and ad-

- vise an interagency research, monitoring, and public outreach program on ocean acidification and coastal acidification;"
- (2) in paragraph (2), by striking "establishment" and inserting "maintenance";
- (3) in paragraph (3), by inserting "and coastal acidification" after "ocean acidification"; and
- (4) in paragraph (4), by inserting "and coastal acidification that take into account other environmental and anthropogenic stressors" after "ocean acidification"
- (b) TECHNICAL AND CONFORMING AMEND-MENT.—Section 12402 of the Federal Ocean Acidification Research and Monitoring Act of 2009 (33 U.S.C. 3701(a)) is amended by striking "(a) PURPOSES.—".

#### SEC. 3. DEFINITIONS.

Section 12403 of the Federal Ocean Acidification Research and Monitoring Act of 2009 (33 U.S.C. 3702) is amended-

- (1) in paragraph (1), by striking "of the Earth's oceans" and all that follows before the period at the end and inserting "and changes in the water chemistry of the Earth's oceans, coastal estuaries, and waterways caused by carbon dioxide from the atmosphere and the breakdown of organic mat-
- (2) in paragraph (3), by striking "Joint Subcommittee on Ocean Science and Technology of the National Science and Technology Council" and inserting "National Science and Technology Council Subcommittee on Ocean Science and Technology'
- (3) by redesignating paragraphs (1), (2), and (3) as paragraphs (2), (3), and (4), respec-
- (4) by inserting before paragraph (2), as so redesignated, the following new paragraph:
- "(1) COASTAL ACIDIFICATION.—The term 'coastal acidification' means the combined decrease in pH and changes in the water chemistry of coastal oceans, estuaries, and other bodies of water from chemical inputs (including carbon dioxide from the atmosphere), freshwater inputs, and excess nutrient run-off from land and coastal atmospheric pollution that result in processes that release carbon dioxide, acidic nitrogen, and sulfur compounds as byproducts which end up in coastal waters."; and
- (5) by adding at the end the following new paragraph:
- "(5) STATE.—The term 'State' means each State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, the Virgin Islands of the United States, and any other territory or possession of the United States."

# SEC. 4. INTERAGENCY WORKING GROUP.

Section 12404 of the Federal Ocean Acidification Research and Monitoring Act of 2009 (33 U.S.C. 3703) is amended-

- (1) in the heading, by striking "SUB-COMMITTEE" and inserting "WORKING GROUP"; (2) in subsection (a)-
- (A) in paragraph (1), by striking "Joint Subcommittee on Ocean Science and Technology of the National Science and Technology Council shall coordinate Federal activities on ocean acidification and establish" and insert "Subcommittee shall establish and maintain";
- (B) in paragraph (2), by striking "Wildlife Service," and inserting "Wildlife Service, the Bureau of Ocean Energy Management, the Environmental Protection Agency, the Department of Agriculture, the Department of State, the Department of Energy, the Department of the Navy, the National Park Service, the Bureau of Indian Affairs, the National Institute of Standards and Technology, the Smithsonian Institution,"; and

- (C) in paragraph (3), in the heading, by striking "CHAIRMAN" and inserting "CHAIR";
  - (3) in subsection (b)—
- (A) in paragraph (1), by inserting ", including the efforts of the National Oceanic and Atmospheric Administration to facilitate such implementation" after "of the plan";
  - (B) in paragraph (2)—
- (i) in subparagraph (A), by inserting "and coastal acidification" after "ocean acidification": and
- (ii) in subparagraph (B), by inserting "and coastal acidification" after "ocean acidification":
- (C) in paragraph (4), by striking "; and" and inserting a semicolon;
  - (D) in paragraph (5)-
- (i) by striking "developed" and inserting "and coastal acidification developed"; and
- (ii) by striking the period at the end and inserting "and coastal acidification; and"; and
- (E) by adding at the end the following new paragraph:
- "(6) ensure that each of the Federal agencies represented on the interagency working groun-
- "(A) participates in the Ocean Acidification Information Exchange established under paragraph (5); and
- "(B) delivers data and information to support the data archive system established under section 12406(d).";
- (4) in subsection (c), in paragraph (2)—
  (A) by inserting ", and to the Office of Management and Budget," after "House of Representatives": and
- (B) in subparagraph (B), by striking "the interagency research" and inserting "interagency strategic research";
- (5) by redesignating subsection (c) as subsection (d): and
- (6) by inserting after subsection (b) the following:
  - "(c) Advisory Board.—
- "(1) ESTABLISHMENT.—The Chair of the Subcommittee shall establish an Ocean Acidification Advisory Board.
  - "(2) DUTIES.—The Advisory Board shall-
- "(A) not later than 180 days before the Subcommittee submits the most recent report under subsection (d)(2)-
  - "(i) review such report;
- "(ii) submit an analysis of such report to the Subcommittee for consideration in the final report submitted under subsection (d)(2); and
- "(iii) concurrently with the Subcommittee's final submission of the report under subsection (d)(2), the Advisory Board shall submit a copy of the analysis provided to the Subcommittee to the Committee on Commerce, Science, and Transportation of the Senate, the Committee on Science, Space, and Technology of the House of Representatives, and the Committee on Natural Resources of the House of Representatives:
- "(B) not later than 180 days before the Subcommittee submits the most recent strategic research plan under subsection (d)(3) to Congress-
  - "(i) review such plan;
- "(ii) submit an analysis of such plan and the implementation thereof to the Subcommittee for consideration in the final strategic research plan submitted under subsection (d)(3); and
- "(iii) concurrently with the Subcommittee's final submission of the strategic research plan under subsection (d)(3), the Advisory Board shall submit a copy of the analysis provided to the Subcommittee to the Committee on Commerce, Science, and Transportation of the Senate, the Committee on Science, Space, and Technology of the House of Representatives, and the Committee on Natural Resources of the House of Representatives;

- "(C) provide ongoing advice to the Subcommittee and the interagency working group on matters related to Federal activities on ocean acidification and coastal acidification:
- "(D) advise the Subcommittee and the interagency working group on—
- "(i) efforts to coordinate research and monitoring activities related to ocean acidification and coastal acidification; and
- "(ii) the best practices for the standards developed for data archiving under section 12406(e);
- ``(E) publish in the Federal Register a charter;
- "(F)" provide the Library of Congress with—
- "(i) the charter described in subparagraph (E):
- "(ii) any schedules and minutes for meetings of the Advisory Board;
- "(iii) any documents that are approved by the Advisory Board; and
- "(iv) any reports and analysis prepared by the Advisory Board: and
- "(G) establish a publicly accessible web page on the website of the National Oceanic and Atmospheric Administration, that contains the information described in clauses (i) through (iv) of subparagraph (F).
- "(3) MEMBERSHIP.—The Advisory Board shall consist of 24 members as follows:
- "(A) Two representatives of the shellfish and crab industry.
- $\mbox{``(B)}$  One representative of the finfish industry.
- "(C) One representative of seafood processors.
- "(D) Three representatives from academia, including both natural and social sciences.
- ``(E) One representative of recreational fishing.
- "(F) One representative of a relevant nongovernmental organization.
- "(G) Six representatives from relevant State, local, and Tribal governments.
- "(H) One representative from the Alaska Ocean Acidification Network or a subsequent entity that represents the same geographical region and has a similar purpose.
- "(I) One representative from the California Current Acidification Network or a subsequent entity that represents the same geographical region and has a similar purpose.
- "(J) One representative from the Northeast Coastal Acidification Network or a subsequent entity that represents the same geographical region and has a similar purpose.
- "(K) One representative from the Southeast Coastal Acidification Network or a subsequent entity that represents the same geographical region and has a similar purpose.
- "(L) One representative from the Gulf of Mexico Coastal Acidification Network or a subsequent entity that represents the same geographical region and has a similar pur-
- "(M) One representative from the Mid-Atlantic Coastal Acidification Network or a subsequent entity that represents the same geographical region and has a similar purpose.
- "(N) One representative from the Pacific Islands Ocean Observing System or a subsequent entity that represents the island territories and possessions of the United States in the Pacific Ocean, and the State of Hawaii and has a similar purpose.
- "(O) One representative from the Caribbean Regional Association for Coastal Ocean Observing or a subsequent entity that represents Puerto Rico and the United States Virgin Islands and has a similar purpose.
- "(P) One representative from the National Oceanic and Atmospheric Administration shall serve as an ex-officio member of the Advisory Board without a vote.

- "(4) APPOINTMENT OF MEMBERS.—The Chair of the Subcommittee shall—
- "(A) appoint members to the Advisory Board (taking into account the geographical interests of each individual to be appointed as a member of the Advisory Board to ensure that an appropriate balance of geographical interests are represented by the members of the Advisory Board) who—
- "(i) represent the interest group for which each seat is designated;
- "(ii) demonstrate expertise on ocean acidification or coastal acidification and its scientific, economic, industry, cultural, and community impacts: and
- "(iii) have a record of distinguished service with respect to ocean acidification or coastal acidification, and such impacts;
- "(B) give consideration to nominations and recommendations from the members of the interagency working group and the public for such appointments; and
- "(C) ensure that an appropriate balance of scientific, industry, and geographical interests are represented by the members of the Advisory Board.
- "(5) TERM OF MEMBERSHIP.—Each member of the Advisory Board—
- "(A) shall be appointed for a 5-year term; and
- "(B) may be appointed to more than one term.
- "(6) CHAIR.—The Chair of the Subcommittee shall appoint one member of the Advisory Board to serve as the Chair of the Advisory Board.
- "(7) MEETINGS.—Not less than once each calendar year, the Advisory Board shall meet at such times and places as may be designated by the Chair of the Advisory Board, in consultation with the Chair of the Subcommittee and the Chair of the interagency working group.
- "(8) BRIEFING.—The Chair of the Advisory Board shall brief the Subcommittee and the interagency working group on the progress of the Advisory Board as necessary or at the request of the Subcommittee.
- "(9) FEDERAL ADVISORY COMMITTEE ACT.— Section 14 of the Federal Advisory Committee Act shall not apply to the Advisory Board."

## SEC. 5. STRATEGIC RESEARCH PLAN.

Section 12405 of the Federal Ocean Acidification Research and Monitoring Act of 2009 (33 U.S.C. 3704) is amended—

- (1) in subsection (a)—
- (A) by striking "acidification" each place it appears and inserting "acidification and coastal acidification";
  - (B) in the first sentence—
- (i) by inserting ", and not later than every 5 years thereafter" after "the date of enactment of this Act":
- (ii) by inserting "address the socioeconomic impacts of ocean acidification and coastal acidification and to" after "mitigation strategies to"; and (iii) by striking "marine ecosystems" each
- (iii) by striking "marine ecosystems" each place it appears and inserting "ecosystems"; and
- (C) in the second sentence, by inserting "and recommendations made by the Advisory Board in the review of the plan required under section 12404(c)(2)(B)(i)" after "subsection (d)";
- (2) in subsection (b)—
- (A) in paragraph (1), by inserting "and social sciences" after "among the ocean sciences";
  - (B) in paragraph (2)—
- (i) in subparagraph (A), by striking "impacts" and inserting "impacts, including trends of changes in ocean chemistry,";
  - (ii) in subparagraph (B)—
- (I) by striking "improve the ability to assess the" and inserting "assess the short-term and long-term"; and

- (II) by striking "; and" at the end and inserting a semicolon;
- (iii) by amending subparagraph (C) to read as follows:
  - "(C) provide information for the-
- "(i) development of adaptation and mitigation strategies to address the socioeconomic impacts of ocean acidification and coastal acidification;
- "(ii) conservation of marine organisms and ecosystems;
- "(iii) assessment of the effectiveness of such adaptation and mitigation strategies; and"; and
- (iv) by adding at the end the following new subparagraph:
  - "(D) improve research on—
- "(i) ocean acidification and coastal acidification;
- "(ii) the interactions between and effects of multiple combined stressors including changes in water chemistry, changes in sediment delivery, hypoxia, and harmful algal blooms, on ocean acidification and coastal acidification; and
- "(iii) the effect of environmental stressors on marine resources and ecosystems;";
  - (C) in paragraph (3)—
- (i) in subparagraph (F), by striking "database development" and inserting "data management";
- (ii) in subparagraph (H) by striking "and" at the end; and
- (iii) by adding at the end the following new subparagraphs:
- "(J) assessment of adaptation and mitigation strategies; and
- tion strategies; and "(K) education and outreach activities;";
- (D) in paragraph (4), by striking "set forth" and inserting "ensure an appropriate balance of contribution in establishing":
- (E) in paragraph (5), by striking "reports" and inserting "the best available peer-reviewed scientific reports";
  - (F) in paragraph (6)—
- (i) by inserting "and coastal acidification" after "ocean acidification"; and
- (ii) by striking "of the United States" and inserting "within the United States":
- (G) in paragraph (7), by striking "outline budget requirements" and inserting "estimate costs associated for full implementation of each element of the plan by fiscal year";
  - (H) in paragraph (8)—
- (i) by inserting "and coastal acidification" after "ocean acidification" each place it appears;
- (ii) by striking "its" and inserting "their"; and
- (iii) by striking "; and" at the end and inserting a semicolon;
- (I) in paragraph (9), by striking the period at the end and inserting "; and"; and
- (J) by adding at the end the following new paragraph:
- "(1) describe monitoring needs necessary to support potentially affected industry members, coastal stakeholders, fishery management councils and commissions, non-Federal resource managers, and scientific experts on decision-making and adaptation related to ocean acidification and coastal acidification.";
  - (3) in subsection (c)—
- (A) in paragraph (1)(C), by striking "surface";
- (B) in paragraph (2), by inserting "and coastal acidification" after "ocean acidification" each place it appears;
  - (C) in paragraph (3)-
- (i) by striking "input, and" and inserting "inputs,":
- (ii) by inserting ", marine food webs," after "marine ecosystems"; and
- (iii) by inserting ", and modeling that supports fisheries management" after "marine organisms";

- (D) in paragraph (5), by inserting "and coastal acidification" after "ocean acidification"; and
- (E) by adding at the end the following new paragraph:
- "(8) Research to understand related and cumulative stressors and other biogeochemical processes occurring in conjunction with ocean acidification and coastal acidification.": and
- (4) by striking subsection (e) and inserting the following:
- "(e) ADVISORY BOARD EVALUATION.—Not later than 180 days before a plan is submitted to Congress, the Subcommittee shall provide the Advisory Board established under section 12404(c) a copy of the plan for purposes of review under paragraph (2)(B)(i) of such section.
- "(f) PUBLICATION AND PUBLIC COMMENT.— Not later than 90 days before the strategic research plan, or any revision thereof, is submitted to Congress, the Subcommittee shall publish the plan in the Federal Register and provide an opportunity for submission of public comments for a period of not less than 60 days."

#### SEC. 6. NOAA OCEAN ACIDIFICATION ACTIVITIES.

- Section 12406 of the Federal Ocean Acidification Research and Monitoring Act of 2009 (33 U.S.C. 3705) is amended—
  - (1) in subsection (a)—
- (A) in the matter preceding paragraph (1), by inserting "coordination," after "research, monitoring,";
  - (B) in paragraph (1)—
  - (i) in subparagraph (B)—
- (I) by inserting "including the Integrated Ocean Observing System and the ocean observing assets of other Federal, State, and Tribal agencies," after "ocean observing assets,"; and
- (II) by inserting "and agency and department missions, prioritizing the location of monitoring instruments, assets, and projects to maximize the efficiency of resources and to optimize understanding of socioeconomic impacts and ecosystem health" after "research program":
  - (ii) in subparagraph (C)-
- (I) by striking "adaptation" and inserting "adaptation and mitigation"; and
- (II) by inserting "and supporting socioeconomically vulnerable States, local governments, Tribes, communities, and industries through technical assistance and mitigation strategies" after "marine ecosystems":
- (iii) in subparagraph (E), by striking "its impacts" and inserting "their respective impacts";
- (iv) in subparagraph (F), by striking "monitoring and impacts research" and inserting "research, monitoring, and adaptation and mitigation strategies"; and
- (v) by adding at the end the following new subparagraph:
- ``(G) research to improve understanding of the effect of—
- "(i) other environmental stressors on ocean acidification and coastal acidification;
- "(ii) multiple environmental stressors on living marine resources and coastal ecosystems; and
- "(iii) adaptation and mitigation strategies to address the socioeconomic impacts of ocean acidification and coastal acidification.";
- (C) in paragraph (2), by striking "critical research projects that explore" and inserting "critical research, education, and outreach projects that explore and communicate"; and
- (D) in paragraphs (1) and (2), by striking "acidification" each place it appears and inserting "acidification and coastal acidification"; and
- (2) by adding at the end the following new subsections:

- "(c) RELATIONSHIP TO INTERAGENCY WORK-ING GROUP.—The National Oceanic and Atmospheric Administration shall serve as the lead Federal agency responsible for coordinating the Federal response to ocean acidification and coastal acidification. by—
- "(1) leading the interagency working group in implementing the strategic research plan under section 12405;
- "(2) coordinating monitoring and research efforts among Federal agencies in cooperation with State, local, and Tribal government and international partners;
- "(3) maintaining an Ocean Acidification Information Exchange described under section 12404(b)(5) to allow for information to be electronically accessible, including information—
- "(A) on ocean acidification developed through or used by the ocean acidification program described under section 12406(a): or
- "(B) that would be useful to State governments, local governments, Tribal governments, resource managers, policymakers, researchers, and other stakeholders in mitigating or adapting to the impacts of ocean acidification and coastal acidification; and
- "(4) establishing and maintaining the data archive system under subsection (d).
  - "(d) DATA ARCHIVE SYSTEM.-
- "(1) Management.—The Secretary, in coordination with members of the interagency working group, shall provide for the long-term stewardship of, and access to, data relating to ocean acidification and coastal acidification by establishing and maintaining a data archive system that the National Center for Environmental Information uses to process, store, archive, provide access to, and incorporate to the extent possible, such data collected—
- "(A) through relevant federally-funded research; and
- "(B) by a Federal agency, State agency, local agency, Tribe, academic scientist, citizen scientist, or industry organization.
- "(2) EXISTING GLOBAL OR NATIONAL DATA AS-SETS.—In establishing and maintaining the data archive system under paragraph (1), the Secretary shall ensure that existing global or national data assets (including the data assets maintained by the National Centers for Environmental Information, the Integrated Ocean Observing System, and other existing data systems within Federal agencies) are incorporated to the greatest extent possible.
- "(e) STANDARDS, PROTOCOLS, AND PROCEDURES.—With respect to the data described in subsection (d), the Secretary, in coordination with members of the interagency working group, shall establish and revise as necessary the standards, protocols, or procedures for—
- "(1) processing, storing, archiving, and providing access to such data;
- "(2) the interoperability and intercalibration of such data;
- "(3) the collection of any metadata underlying such data; and
- "(4) sharing such data with State, local, and Tribal government programs, potentially affected industry members, coastal stakeholders, fishery management councils and commissions, non-Federal resource managers, and academia.
- "(f) DISSEMINATION OF OCEAN ACIDIFICATION DATA AND COASTAL ACIDIFICATION DATA.—
  The Secretary, in coordination with members of the interagency working group, shall disseminate the data described under subsection (d) to the greatest extent practicable by sharing such data on full and open access exchanges.
- "(g) REQUIREMENT.—Recipients of grants from the National Oceanic and Atmospheric Administration under this subtitle that col-

- lect data described under subsection (d) shall—
- "(1) collect such data in accordance with the standards, protocols, or procedures established pursuant to subsection (e); and
- "(2) submit such data to the data archive system under subsection (d) after publication, in accordance with any rules promulgated by the Secretary.".

#### SEC. 7. NSF OCEAN ACIDIFICATION ACTIVITIES.

Section 12407 of the Federal Ocean Acidification Research and Monitoring Act of 2009 (33 U.S.C. 3706) is amended—

- (1) by striking "ocean acidification" each place it appears and inserting "ocean acidification and coastal acidification";
  - (2) in subsection (a)-
- (A) in the matter preceding paragraph (1), by striking "its impacts" and inserting "their respective impacts";
- (B) in paragraph (3), by striking "and its impacts" and inserting "and their respective impacts";
- (C) in paragraph (4), by striking the period at the end and inserting "; and"; and
- (D) by adding at the end the following new paragraph:
- "(5) adaptation and mitigation strategies to address socioeconomic effects of ocean acidification and coastal acidification."; and
- (3) by adding at the end the following:
- "(d) REQUIREMENT.—Recipients of grants from the National Science Foundation under this subtitle that collect data described under section 12406(d) shall—
- "(1) collect data in accordance with the standards, protocols, or procedures established pursuant to section 12406(e); and
- "(2) submit such data to the Director and the Secretary after publication, in accordance with any rules promulgated by the Director or the Secretary.".

#### SEC. 8. NASA OCEAN ACIDIFICATION ACTIVITIES.

Section 12408 of the Federal Ocean Acidification Research and Monitoring Act of 2009 (33 U.S.C. 3707) is amended—

- (1) by striking "ocean acidification" each place it appears and inserting "ocean acidification and coastal acidification";
- (2) in subsection (a), by striking "its impacts" and inserting "their respective impacts"; and
- (3) by adding at the end the following new subsection:
- "(d) REQUIREMENT.—Researchers from the National Aeronautics and Space Administration under this subtitle that collect data described under section 12406(d) shall—
- "(1) collect such data in accordance with the standards, protocols, or procedures established pursuant to section 12406(e); and
- "(2) submit such data to the Administrator and the Secretary, in accordance with any rules promulgated by the Administrator or the Secretary.".

## SEC. 9. AUTHORIZATION OF APPROPRIATIONS.

Section 12409 of the Federal Ocean Acidification Research and Monitoring Act of 2009 (33 U.S.C. 3708) is amended—

- (1) in subsection (a), by striking "subtitle—" and all that follows through paragraph (4) and inserting the following: "subtitle—
  - "(1) \$30,500,000 for fiscal year 2022;
- "(2) \$35,000,000 for fiscal year 2023;
- "(3) \$40,000,000 for fiscal year 2024;
- "(4) \$45,000,000 for fiscal year 2025; and "(5) \$50,000,000 for fiscal year 2026."; and
- (2) in subsection (b), by striking "subtitle—" and all that follows through paragraph (4) and inserting the following: "subtitle \$20,000,000 for each of the fiscal years

2022 through 2026.".

The SPEAKER pro tempore. Pursuant to the rule, the gentlewoman from

Oregon (Ms. BONAMICI) and the gentleman from Oklahoma (Mr. LUCAS) each will control 20 minutes.

The Chair recognizes the gentle-woman from Oregon.

#### GENERAL LEAVE

Ms. BONAMICI. Madam Speaker, I ask unanimous consent that all Members may have 5 legislative days in which to revise and extend their remarks and include extraneous material on H.R. 1447, the bill now under consideration.

The SPEAKER pro tempore. Is there objection to the request of the gentlewoman from Oregon?

There was no objection.

Ms. BONAMICI. Madam Speaker, I yield myself such time as I may consume.

I rise today in support of the Coastal and Ocean Acidification Stressors and Threats, or COAST, Research Act, my bipartisan bill to help coastal communities adapt to the climate crisis by expanding scientific research, monitoring, and adaptation of ocean and coastal acidification.

I want to thank all of the staff on both sides of the aisle, from the committee and my personal staff, especially Maxine Sugarman, for all their work on this bill.

Every person on this planet benefits from a healthy ocean. The ocean covers more than 70 percent of the planet's surface. It supplies much of the oxygen that we breathe and regulates our climate. It is linked to the water we drink, and it is home to more than half of all life on the planet. The power of its waves generates clean energy. The ocean drives our economy, feeds, employs, and transports us. But despite our intrinsic connection, for too long the ocean has taken the heat for us.

According to the Fourth National Climate Assessment, atmospheric carbon dioxide concentrations are now higher than at any time in the last 3 million years. Approximately one-third of the carbon dioxide in the atmosphere dissolves into our ocean and estuaries, causing them to become more acidic.

Ocean and coastal acidification make it difficult for shellfish, coral, and other marine organisms to build their shells and skeletal structures. Some finfish, including endangered salmon in the Pacific Northwest, lose their sense of smell necessary for identifying prey, reproducing, and navigating their habitats. Our understanding of the longterm consequences of ocean acidification is still limited, but we do know that the changes in ocean chemistry are already affecting the fishers and shellfish farmers who depend on the ocean's resources to support themselves and their families and the Tribes that have treaty rights and deep cultural and historical connections to diminishing species.

The most effective strategy for mitigating ocean acidification is reducing anthropogenic sources of carbon dioxide pollution worldwide. I have joined

with colleagues on the Select Committee on the Climate Crisis in releasing a bold, comprehensive, and science-based Climate Action Plan to reach net-zero emissions no later than midcentury and net-negative thereafter. But there are also actions that we can take immediately to improve conditions, lessen exposure to ocean acidification, and manage local pollution and conditions that can exacerbate acidification.

This bill, which I introduced with my fellow co-chair of the House Oceans Caucus, Representative Young from Alaska, and with Representatives PIN-GREE and Posey, would improve scientific research on ocean and coastal acidification in the context of other environmental stressors and direct Federal agencies to assess adaptation and mitigation strategies. Funding has lagged behind the needs of the scientific community for years, and this bill would provide a modest, but important, increase for the National Oceanic and Atmospheric Administration and the National Science Foundation to scale up research efforts. Importantly, the bill also expands the definition of ocean acidification to include estuaries and recognize mechanisms that cause changes in coastal chemistry.

NOAA is already leading interdisciplinary efforts to expand our understanding of changing ocean conditions in its role as chair of the Interagency Working Group on Ocean Acidification. In fact, this year marks the 10th anniversary of the NOAA Ocean Acidification Program, and I hope my colleagues will join me in applauding their work to truly advance regionally coordinated scientific research.

A September 2015 Government Accountability Office report suggested that an independent national ocean acidification program could advance our understanding of changing ocean conditions. The COAST Research Act designates NOAA as the lead Federal agency responsible for implementing the Federal response to ocean and coastal acidification, further empowering the Ocean Acidification Program to scale up its efforts with its first reauthorization in more than a decade.

Additionally, the COAST Research Act increases our understanding of the socioeconomic effects of ocean and coastal acidification and, importantly, it engages stakeholders. The bill creates an advisory board of representatives of the shellfish and crab industry, finfish industry, seafood processors, recreational fishing, academia, nongovernmental organizations, State, local, and Tribal governments, and regional coastal acidification networks. The regionally balanced board will advise NOAA and the Interagency Working Group on coastal and ocean acidification research and monitoring activities. This collaborative process will help make sure that vulnerable and affected communities, industries, and coastal and ocean managers have the tools they need to adapt and mitigate

the effects of coastal and ocean acidification.

For example, at Oregon State University, Dr. Burke Hales developed the "Burke-o-Lator," a device the size of a piece of carry-on luggage, that can analyze when shellfish growers across the Pacific Northwest should grow larvae based on the ocean acidity and the effects on calcium carbonates needed for shell formation. Other research at Oregon State has demonstrated how growing particular seagrasses kelps can help counteract ocean acidification. These examples help demonstrate what is possible when we invest in science and research to help coastal communities adapt to the climate crisis.

The COAST Research Act directs NOAA to maintain a system to process, store, archive, and provide access to data on ocean and coastal acidification from federally funded research, including existing global or national datasets, and research from State and local agencies, Tribes, academic scientists, citizen scientists, and industry organizations. These efforts will help provide for the long-term stewardship and standardization of ocean acidification data and better help communities adapt and mitigate the worst effects.

Madam Speaker, the health of our ocean reflects the health of our planet. Today, we have the opportunity to help it become more resilient by passing the bipartisan COAST Research Act.

I thank Chairwoman JOHNSON and Ranking Member LUCAS and my cosponsors for their leadership. I urge my colleagues to support the bill.

I reference letters from Earthjustice, Ocean Conservancy, Wild Salmon Center, Pacific Coast Shellfish Growers Association, Integrated Ocean Observing System Association, Surfrider Foundation, Oregon Coordinating Council on Ocean Acidification and Hypoxia, Consortium for Ocean Leadership, Oregon State University, Northwest Association of Networked Ocean Observing Systems, and Pacific States Marine Fisheries Commission, in support of the COAST Research Act.

Madam Speaker, I include in the RECORD several of the above-referenced letters.

OREGON STATE UNIVERSITY,

Corvallis, Oregon, 10 February 2021.

Re The Coastal and Ocean Acidification

Stressors and Threats (COAST) Research

Act

Hon. Suzanne Bonamici, House of Representatives. Washington, DC.

DEAR REPRESENTATIVE BONAMICI: We write to offer Oregon State University's support for The Coastal and Ocean Acidification Stressors and Threats (COAST) Research Act.

As marine habitats face new and daunting pressures threatening their sustainability, the COAST Research Act identifies the growing need for strategic and robust investments in ocean acidification (OA) research, monitoring and stakeholder collaboration.

Oregon State University is committed to interdisciplinary approaches to address the national and global challenges facing our oceans and coast communities. OSU has a deep history of global leadership in oceanography and engages in nationally ranked oceanographic monitoring programs and world-leading OA research. Further, the university recognizes that Oregon's estuaries and coastal regions are home to some of the world's most productive ecosystems and economically vital shellfish farms.

The university is encouraged that the COAST Research Act expands the definition of OA to include coastal and estuarine systems, and identifies OA as being affected by a combination of factors, including hypoxia. The university believes that by expanding federal definitions of OA and by increasing funding opportunities, researchers and managers will be able to best utilize resources to find solutions to address OA.

The university also is encouraged that this legislation recognizes the need for federal engagement to continue important investments to understand and address ocean and coastal acidification. Doing so will enhance the integration of OA research, monitoring and adaptation strategies across principal federal research agencies, including the National Science Foundation, National Oceanographic and Atmospheric Administration, and the National Aeronautics and Space Administration.

Oregon State University understands that effective and collaborative partnerships and communication are essential for our state and nation to find adaptive and mitigation solutions to address OA. For example, the proposal to establish an Ocean Acidification Advisory Board will be essential for facilitating the important work still to be done.

The world's ocean belongs to everyone, and ocean health is critical to our future. In the coming decades, it will be essential for the nation and its universities to work collaboratively to improve and sustain the health of our oceans. Doing so, we will assure human wellness, environmental health and economic prosperity for future generations.

In closing, Oregon State University believes that the COAST Research Act proposes important new strategic tools to expand understanding and address the problems facing our oceans and coastal communities.

Sincerely,

EDWARD FESER, Ph.D.,
Provost and Executive
Vice President.
IREM TUMER, Ph.D., ASME
Fellow,
Vice President for Research.

PACIFIC STATES MARINE FISHERIES COMMISSION, Portland, OR, February 9, 2021.

Hon. SUZANNE BONAMICI,

Washington, DC.

DEAR REPRESENTATIVE BONAMICI: On behalf of the Pacific States Marine Fisheries Commission, I am writing in support of the Coastal and Ocean Acidification Stressors and Threats (COAST) Research Act.

The COAST Act would dedicate greater resources and focus on the issue of ocean acidification. The legislation increases Federal research, planning, interagency coordination, data collection, stakeholder input, and socioeconomic study into this growing and vexing problem impacting our marine fisheries and wildlife. The Commission appreciates the thoughtful and bipartisan approach you and Representatives Young, Pingree and Posey have taken in developing the bill.

The Commission's membership includes the State fisheries and wildlife agencies of five West Coast states, including Alaska, California, Idaho, Oregon and Washington. Our coastal members have seen the firsthand impact of ocean acidification with early research showing a detrimental effect on shell formation in our crab and shellfish species. Over time, these chemical changes to shell composition could be devastating to our valuable Dungeness crab fishery and inshore shellfish aquaculture operators. There is much more that needs to be learned about the effect of ocean acidification on these and other marine species so that appropriate public policy measures and solutions can be pursued at both the Federal and state levels.

Ocean acidification is one side effect of other changes in ocean temperatures and conditions that have been harmful along the West Coast. Regional temperature oscillation during the El Nino/La Nina cycles has increased dramatically in recent years. Average sea surface temperatures have increased by as much as 7 degrees in some years resulting to many unfortunate effects to fisheries and marine mammals, including harmful algal blooms leading to Dungeness crab season closures; low salmon returns due to reduced ocean survivability of juvenile fish; shifts in whale migration patterns causing greater entanglement in fishing gear and shipping vessel strikes; and sea lion stranding and die-offs from consumption of crab and shellfish poisoned by domoic acid.

Thank you for your leadership in reintroducing the COAST Act. The Commission stands ready to assist and serve as a resource for you and your staff as the bill moves through the legislative process.

Sincerely,

RANDY FISHER, Executive Director.

PCSGA, PACIFIC COAST SHELLFISH GROWERS ASSOCIATION.

March 18, 2021.

Hon. Suzanne Bonamici, House of Representatives, Washington, DC.

DEAR REPRESENTATIVE BONAMICI: On behalf of the members of Pacific Coast Shellfish Growers Association (PCSGA), I am submitting this letter of support for the Coastal and Ocean Acidification Stressors and Threats (COAST) Research Act of 2019. Shellfish growers were the first community to call attention to the problems associated with ocean acidification when, in 2007, they experienced severe oyster larvae mortality in two out of three major west coast shellfish hatcheries. Since then, PCSGA has engaged in several local, state, and federal efforts and initiatives to ensure a future for this historic industry.

Shellfish farming on the west coast began in the late 1800's, fueled the California Gold Rush and was the reason for the development of many coastal towns. Today, PCSGA, proudly represents 120 shellfish farms in Alaska, Washington, Oregon, California and Hawaii which farm mussels, clams, oysters and geoduck. Our members not only produce sustainable, healthy, food, but also provide significant ecosystem services such aquatic habitat and water filtration, and support thousands of family-wage jobs within rural coastal communities.

For nearly a decade, the shellfish industry has benefited from NOAA's Ocean Acidification Program and the Integrated Ocean Observing System (IOOS), both of which relate to the Federal Ocean Acidification Research and Monitoring (FOARAM) Act of 2009. These programs and the directives within FOARAM have influenced the way shellfish growers operate their farms among the uncertainty of changing ocean conditions. Historically, growers only consulting their tide charts. Now, growers rely upon a variety of real-time data and tools to understand the ocean changes and adapt methods and prac-

tices which allow them to continue farming in a productive and profitable manner. There much work ahead of us and much yet to learn. COAST Research Act provides an essential pathway forward.

We are excited by the intent of COAST Research Act, the opportunities it provides and that it's been included as part of the Climate Action Plan. We see how COAST will further investments in ocean and coastal acidification research and monitoring, assist shellfish community with much needed adaptation strategies and coordinate work with stakeholders. Simply put, COAST is a logical and necessary follow-up to FOARAM and allows us to continue asking questions and seek innovative approaches to mitigate the impacts related to ocean acidification.

Thank you very much for your leadership on this and for your commitment to ensuring the long-term health of our coastal and marine areas upon which shellfish growers depend.

Respectfully,

MARGARET A. PILARO, Executive Director.

THE OREGON COORDINATING COUNCIL ON OCEAN ACIDIFICATION AND HYPOXIA.

February 12th, 2021.
Re Coastal and Ocean Acidification Stressors and Threats (COAST) Research Act.

Hon. SUZANNE BONAMICI, Washington. DC.

As the Co-Chairs of the State legislatively mandated, Oregon Coordinating Council on Ocean Acidification and Hypoxia (or "Oregon OAH Council"), we appreciate the opportunity to provide you with a letter of strong support for the Coastal and Ocean Acidification Stressors and Threats (COAST) Research Act. Addressing intensifying ocean acidification (OA) conditions here in Oregon, as well as across the United States, is critical to our Nation's understanding of larger impacts from CO<sub>2</sub> emissions.

Oregon is among the first places in the world to observe direct impacts of ocean acidification and hypoxia (OAH), due to our unique geographic and oceanographic context, putting our fragile marine ecosystem at risk. Our coastal economies rely on our vibrant marine ecosystem. Our nearshore waters are home to sport and commercial fisheries, all of the State's mariculture operations, and contain critical nursery grounds for economically important species including rockfish, oysters, salmon, pink shrimp, and Dungeness crab. Oregon is not alone in experiencing the impacts from OA or hypoxia. Through actions such as those in the COAST Research Act we must act together as Americans to develop solutions for our coastal communities, economies, and ecosystems to prepare for future conditions.

In the coming years, the Oregon OAH Council will continue to take a collaborative, science-based approach to developing recommendations to address OAH in our state and beyond. Through further investments and initiatives, Oregon and the United States will benefit from adaptation and mitigation measures and will model to the world how to develop actionable solutions for OA adaptation and mitigation.

Oregon has identified three urgently needed strategic actions, which directly align with objectives within the COAST Research

(1) Monitoring of key oceanographic and biological indicators of impacts from OAH.

At the same time that OA has been impacting our coasts, oxygen-depletion is on the rise; Oregon and much of the West coast has seen several seasons in a row with extended periods of hypoxia in our coastal

waters. The Oregon OAH Council is encouraged that the COAST Research Act identifies the need to strengthen investments in OA research and monitoring in the context of other environmental stressors. Ocean acidification and hypoxia are compounding stressors for a wide range of marine animals, and as such must continue to be studied together. Through the COAST Research Acts reauthorization of funding of NOAA, NSF, and NASA, much needed resources will be made available to researchers across the United States to continue to expand our knowledge of OAH. The Oregon OAH Council also supports the initiative of the COAST Research Act to create data processing, storage, and archive facilities to provide for the long-term stewardship and standardization of data. By creating a central repository for OAH data it provides governments, scientists, and industry better access to the information need to inform their mitigation and adaption planning. Only by maximizing our current data and filling our knowledge gaps of OAH, can we as a Nation begin to be able to piece together for solutions for our coastal communities.

(2) Projects or programs that promote coastal economic and ecosystem resilience to OAH.

Fisheries and aquaculture are central to our history, are enjoyed by Americans across the nation year-round, and remain key to many of Oregon's coastal economies today. Yet, the future sustainability of these marine resources and communities' ability to rely on them, are uncertain in the face of significant ocean changes, including OAH, and uncertain in the face of our current state of preparation to adapt to those changes over time. This is why the Oregon OAH Council supports activities and initiatives that promote resilience to increased OAH conditions, for both human communities and ecosystems. The COAST Research Act also stresses the importance of increasing our understanding of the socioeconomic effects of OA by expanding federal research to assess adaptation and mitigation strategies. There will be costs of inaction relative to CO2 mitigation and the United States has an obligation to relieve these costs wherever possible for our citizens.

(3) Tools and strategies to increase awareness of OAH science, impacts and solutions. As the impacts of OA intensify, it is going to be vitally important for our Nation to identify and advance opportunities to raise awareness of and communicate OAH science, impacts, and mitigation solutions. This is why the Oregon OAH Council is encouraged by the fact that the COAST Research Act recognizes the need to address the effects of OA on estuaries and integrate research, monitoring, and adaptation strategies. By integrating OA causes and effects, it better demonstrates the complexity of this climate issue, and provides a clearer message to communities. The Oregon OAH Council also supports the COAST Research Act establishment of an Advisory Board to increase coordination among stakeholders, including members of industry, to work with State and Federal governments to improve coordination. Recognizing the importance of a broad membership, our Oregon OAH Council includes members from industry, academia and state government agencies. For the benefit of our marine ecosystem and the human communities that rely on a healthy marine ecosystem, the Nation's adaptation and mitigation approaches to OA should include successful communication of new science, monitoring, and adaptation strategies.

As Co-Chairs of the Oregon OAH Council, we appreciate the opportunity to provide you with a letter of strong support for the COAST Research Act. The strategic invest-

ment and coordination opportunities outlined in this act are meaningful and will make a difference in our understanding of OAH science, impacts, and solutions. Through passage of this Act and the subsequent investment in science, adaptation and communications, the United States will demonstrate meaningful action in fighting OA and the global challenges of climate change, and preparing our citizens and economies for the changes ahead.

Thank you for your consideration of these comments.

Sincerely,

John Barth, Phd, Co-Chair, Oregon OAH Council, Executive Director, Marine Studies Initiative, Oregon State University.

CAREN BRABY, PHD, Co-Chair, Oregon OAH Council, Marine Resources Program Manager, Oregon Department of Fish and Wildlife.

NORTHWEST NETWORKED SYSTEMS, ASSOCIATION OF OCEAN OBSERVING

Seattle, WA, 14 May 2021.

Hon. Suzanne Bonamici, House of Representatives, Washington DC.

DEAR CONGRESSWOMAN BONAMICI: As the Director of the Northwest Association of Ocean Observing Systems (NANOOS), I write in support of the Coastal and Ocean Acidification Stressors and Threats (COAST) Research Act.

NANOOS provides access to near-real time observations, forecasts, and other tools that can be used to observe water properties in the Salish Sea and the coastal waters off Washington and Oregon. NANOOS can only serve our stakeholders via NOAA's Integrated Ocean Observing System (IOOS). which links together Federal agencies with our collective of local universities, government agencies, tribes, nonprofits, and industry organizations who collect quality oceanographic and meteorological data from moorings, buoys, and satellites from across the Pacific Northwest region. But our resources are limited and this COAST Research Act would help to highlight the payoff investments can make.

In the Pacific Northwest, we know that ocean acidification is an issue already, as witnessed by the difference that monitoring water chemistry has made to shellfish growers. We know that impacts from ocean acidification may affect shellfish harvesters, fishermen, resource managers, and tribal and other coastal communities. NANOOS' work with IOOS and NOAA's Ocean Acidification Program have been instrumental in aiding adaptation.

The COAST Research Act will enhance these and other efforts to understand, monitor, and manage the nation's ability to respond and adapt to ocean acidification. NANOOS will be better able to meet the needs of our stakeholders if this Act is passed.

My thanks for your leadership and insights.

s. Sincerely.

JAN NEWTON, NANOOS Executive Director.

Ms. BONAMICI. Madam Speaker, I reserve the balance of my time.

House of Representatives, Committee on Natural Resources, Washington, DC, April 19, 2021.

Hon. Eddie Bernice Johnson,

Chairwoman, Committee on Science, Space, and Technology, House of Representatives, Washington, DC.

DEAR CHAIRWOMAN JOHNSON: In recognition of the goal of expediting consideration of H.R. 1447, the "Coastal and Ocean Acidification Stressors and Threats Research Act of 2021," the Committee on Natural Resources agrees to waive formal consideration of the bill as to provisions that fall within the Rule X jurisdiction of the Committee on Natural Resources.

The Committee on Natural Resources takes this action with the mutual understanding that, in doing so, we do not waive any jurisdiction over the subject matter contained in this or similar legislation, and that the Committee will be appropriately consulted and involved as the bill or similar legislation moves forward so that we may address any remaining issues within our jurisdiction. Our Committee also reserves the right to seek appointment of conferees to any House-Senate conference involving this or similar legislation.

Thank you for agreeing to include our exchange of letters in the *Congressional Record*. I appreciate your cooperation regarding this legislation and look forward to continuing to work with you as this measure moves through the legislative process.

Sincerely,

RAÚL M. GRIJALVA, Chair, House Natural Resources Committee.

HOUSE OF REPRESENTATIVES, COM-MITTEE ON SCIENCE, SPACE, AND TECHNOLOGY.

TECHNOLOGY,
Washington, DC, April 16, 2021.
Chairman Raúl M. Grijalva,

Committee on Natural Resources, House of Representatives, Washington, DC.

DEAR CHAIRMAN GRIJALVA: I am writing to you concerning H.R. 1447, the "Coastal and Ocean Acidification Stressors and Threats Research Act of 2021," which was referred to the Committee on Science, Space, and Technology on March 1, 2021.

I appreciate your willingness to work cooperatively on this bill. I recognize that the bill contains provisions that fall within the jurisdiction of the Committee on Natural Resources. I acknowledge that your Committee will waive further consideration of H.R. 1447 and that this action is not a waiver of future jurisdictional claims by the Committee on Natural Resources over this subject matter.

I will make sure to include our exchange of letters in the *Congressional Record* and will support the appointment of the Committee on Natural Resources conferees during any House-Senate conference. Thank you for your cooperation on this legislation.

Sincerely,

Eddie Bernice Johnson, Chairwoman.

## □ 1600

Mr. LUCAS. Madam Speaker, I yield myself such time as I may consume.

Madam Speaker, I rise in support of H.R. 1447, the COAST Research Act of 2021. This bipartisan legislation would reauthorize and modernize the Federal Government's ocean acidification research and monitoring programs.

Ocean acidification is the result of a gradual decrease in pH in the ocean chemistry. Even a small shift in pH can have a serious effect on marine ecosystems, including shellfish habitat, coral reefs, and fisheries habitat.

Congress recognized the need for a better understanding of the causes and effects of ocean acidification and passed the Federal Ocean Acidification Research and Monitoring Act in 2009. That legislation created a framework for science agencies such as NOAA and the National Science Foundation to dedicate resources to studying the phenomenon. As a result, we made significant advancements in understanding ocean acidification over the last decade.

H.R. 1447 reauthorizes the funding for NOAA and NSF efforts through the fiscal year 2026, which lapsed in fiscal year 2012. It also modernizes their activities by updating the strategic plan governing the Federal Government's research efforts and strengthening cooperation among scientific agencies.

Additionally, the COAST Research Act designates NOAA as the lead agency for coordinating the Federal response to ocean and coastal acidification. This is an important step to streamline and organize efforts across the government.

Finally, this bill ensures that the voices of stakeholders and industry from multiple regions are heard through a newly established advisory board. This input is critical to effectively integrate the many research, monitoring, and adaptation strategies for coastal acidification.

This bill is the result of years of work in building a consensus among stakeholders, including ocean conservation groups, sportsmen, and coastal communities about how best to address this problem moving forward.

Coastal communities and businesses will greatly benefit from this legislation and how better knowledge of ocean acidification improves our ability to respond to its effects.

I thank Ms. Bonamici for introducing and leading this bill along with her House Oceans Caucus vice chair, Congressman Don Young, along with the many bipartisan cosponsors.

I urge my colleagues to support this bill, and I reserve the balance of my time.

Ms. BONAMICI. Mr. Speaker, I yield such time as she may consume to the gentlewoman from Maine (Ms. PINGREE), a cosponsor of the COAST Research Act.

Ms. PINGREE. Mr. Speaker, I thank the chair and the ranking member, who have shown a true willingness to address the impact climate change has had on our oceans; and to Congresswoman Bonamici and Congressman Young for their leadership on ocean and climate issues.

I rise today in support of the gentlewoman's bill, H.R. 1447, the Coastal and Ocean Acidification Stressors and Threats Research Act, a bipartisan bill that would expand scientific research and monitoring to improve our understanding of ocean acidification.

Our oceans absorb enormous amounts of carbon dioxide each year. That process is critical for regulating the amount of greenhouse gases in our atmosphere, but this comes at a high cost for oceans and dependent marine life.

Coastal communities produce about 40 percent of our Nation's total jobs and 45 percent of our gross domestic product. Given those significant numbers, the financial implications will ripple across all American communities if this problem continues to intensify.

We are already experiencing these impacts in my home State of Maine. The Gulf of Maine is warming faster than 99 percent of the world's oceans, and it is particularly susceptible to the effects of ocean acidification.

As you know, Mr. Speaker, my State is renowned for its lobster and shell-fish, so you can imagine we take this threat seriously. Bill Mook, an oyster farmer on Maine's Damariscotta River, has explained to me how he has adjusted his operations to mitigate for ocean acidification. Bill and so many growers are worried about how future oyster production will be affected when the problem outpaces the adaptations that can be made.

I support the COAST Research Act because it would strengthen investments in ocean acidification research and monitoring, increase our understanding of the socioeconomic effects of ocean acidification, and more.

Mr. Speaker, I urge my colleagues to join me in supporting H.R. 1447. It is critical that we act to protect our oceans and our coastal communities so they are here for future generations.

Mr. LUCAS. Mr. Speaker, I yield such time as he may consume to the gentleman from Alaska (Mr. Young), one of the most outstanding individuals in this body; the dean of the House Republican Conference; the dean of the United States House; but, most importantly, and fortunately for his constituents, the dean of the Alaska congressional delegation.

Mr. YOUNG. Mr. Speaker, I thank my good friend Mr. Lucas for his kind compliments. It is the best I have heard all day.

I thank Ms. Bonamici, the chair of this committee, for bringing this bill to the floor.

I am excited about it because the oceans and our waterways are important to our lives. More than anybody recognizes, water is the next big issue. Oceans do cover 76 percent of our globe. In doing so, if they get acidified, then we lose the oceans, not only what it provides to us, but livelihoods to many fishermen in my communities, which is very, very important.

I am, very frankly, very excited about this legislation. We have to do more than legislation, though, because the acidification of the ocean, what causes it, we have to address. Some say it is climate change. Let's do that. Let's look at why.

I have just been reading a very serious set of articles on e-fuels, which I was unaware were created by capturing

 ${\rm CO_2}$  and making it into another fuel which is cleaner, especially for maritime fleets. I am a mariner, and that would be very, very important because they are one of the more pollutant factors we have, yet they transport world goods. So we have to address that.

As we pass this legislation, let's really go forth and make sure not only NOAA has the authority, but make sure they do the job. That is oversight. That is your job, Madam Chairman. That is what we have to do to make sure it is done and address the problem.

You talk about your lobster. It is good, but not quite as good as our salmon, but it is okay. We have to work on that to make sure that we have a continued sustainable yield that we will be working with.

Mr. LUCAS. Mr. Speaker, I yield myself the balance of my time.

Mr. Speaker, I again rise to support H.R. 1447, the COAST Research Act of 2021. It is necessary, bipartisan legislation with support from Members representing a diverse range of districts.

As I previously mentioned, significant progress toward our understanding the socioeconomic effects of ocean and coastal acidification has been made in the last decade. But to continue that progress, we need to update our priorities and our strategies.

That is what this bill does. That is what will keep our communities, our businesses, and our entire economy at the forefront of managing and mitigating the environmental challenges we face.

Mr. Speaker, I urge my colleagues to support this bill, and I yield back the balance of my time.

Ms. BONAMICI. Mr. Speaker, I yield myself the balance of my time.

The basic chemistry of our ocean is changing at an unprecedented rate. We know that even if carbon dioxide emissions were halted today, many of the residual effects on our oceans will continue to occur over the course of the next few decades.

Without intervention, ocean acidification is projected to become more intense and increasingly common, especially on the Pacific Coast. We must support vulnerable communities, industries, coastal and ocean managers by strengthening research on how they can best prepare for and, when possible, adapt to ocean and coastal acidification.

By passing the bipartisan COAST Research Act, we are taking one important step forward in advancing ocean climate action.

I, again, thank Chairwoman Johnson; Ranking Member Lucas; and my coleads on this bill, Representative Young, Pingree, and Posey for their support.

I know Mr. Young from Alaska talked about his salmon. We would compete with salmon in the Pacific Northwest. We also have the prize dungeness crab, and Ms. PINGREE has her lobsters. It is so critical for these industries that we pass this bill and advance ocean climate action.

I, once again, urge my colleagues on both sides of the aisle to support this bipartisan bill.

Mr. Speaker, I yield back the balance of my time.

Mr. POSEY. Mr. Speaker, I'm proud to join Congresswoman BONAMICI as an original cosponsor.

For those of us who live on the "coast," the coast is that unique place where our lives, our environment, and our economy participate in a special relationship with the ocean.

In my own State of Florida, we know that about 6 million people work in our coastal counties. They earn nearly \$280 billion dollars in wages and produce close to \$700 billion in gross domestic product.

Life on the coast is rich in rewards, but also uncertain and often perilous.

Those of us who live on the coast have known for a long time how important sustainability and resilience are for our coasts. We have weathered the storms of the past and we must do so in the future.

Science and research are our best hope for continuing to live in harmony with our coasts.

Research can prepare us for assaults on our coasts and help us defend our wildlife and biodiversity from threats like acidification.

We must take care of our precious coasts so that we can continue to enjoy the lifestyle and the economic well-being we cherish.

That is why I've joined Congresswoman SUZANNE BONAMICI in directing NOAA to pick up the role of leading research for coastal acidification.

I ask my colleagues to support the COAST Research Act

The SPEAKER pro tempore (Mr. Cuellar). The question is on the motion offered by the gentlewoman from Oregon (Ms. Bonamici) that the House suspend the rules and pass the bill, H.R. 1447, as amended.

The question was taken.

The SPEAKER pro tempore. In the opinion of the Chair, two-thirds being in the affirmative, the ayes have it.

Mr. ROSENDALE. Mr. Speaker, on that I demand the yeas and nays.

The SPEAKER pro tempore. Pursuant to section 3(s) of House Resolution 8, the yeas and nays are ordered.

Pursuant to clause 8 of rule XX, further proceedings on this motion are postponed.

## NATIONAL ESTUARIES AND ACIDI-FICATION RESEARCH ACT OF 2021

Ms. BONAMICI. Mr. Speaker, I move to suspend the rules and pass the bill (H.R. 2533) to provide for a study by the National Academies of Sciences, Engineering, and Medicine examining the impact of ocean acidification and other stressors in estuarine environments.

The Clerk read the title of the bill. The text of the bill is as follows:

H.R. 2533

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

# SECTION 1. SHORT TITLE.

This Act may be cited as the "National Estuaries and Acidification Research Act of 2021" or the "NEAR Act of 2021".

# SEC. 2. FINDINGS.

Congress finds the following:

- (1) Ocean acidification impacts human health, natural resources, and the environmental, economic, and recreational uses of the coastline.
- (2) The current understanding of ocean acidification impacts on estuarine ecosystems is inadequate to fully prepare and manage for changing environmental conditions in nearshore locations.
- (3) While pH can be measured with high precision and accuracy in open ocean environments, more understanding of the carbonate system in estuarine ecosystems is needed for precise and accurate measurements and observations.
- (4) The interaction of multiple stressors, including salinity, pH, temperature, sea level rise, and nutrient input, within estuarine ecosystems is inadequately understood for managing the health, economic, recreational, and environmental impacts driven by these interactions.
- (5) A better understanding is needed of how anthropogenic influences in coastal environments affect estuarine ecosystems.
- (6) More integration and coordination is needed among regional, national, and global environmental observations in estuarine environments, supporting prior investments in related topics such as nutrient loading, hypoxia, ocean acidification, and harmful algae bloom research and observational systems.

# SEC. 3. STUDY EXAMINING THE IMPACT OF OCEAN ACIDIFICATION AND OTHER ENVIRONMENTAL STRESSORS ON ESTUARINE ENVIRONMENTS.

- (a) IN GENERAL.—Not later than 60 days after the date of enactment of this Act, the Secretary of Commerce shall make appropriate arrangements with the National Academies of Sciences, Engineering, and Medicine (referred to in this Act as the "National Academies") under which the National Academies shall conduct a study that—
- (1) examines the existing science of ocean acidification in estuarine environments:
- (2) examines the challenges to studying ocean acidification and ocean acidification's interactions with other environment stressors in estuarine environments:
- (3) provides recommendations for improving future research with respect to ocean acidification in estuarine environments: and
- (4) identifies pathways for applying science in management and mitigation decisions relating to ocean acidification in estuarine environments.
- (b) CONTENTS OF STUDY.—The study described under subsection (a) shall include—
- (1) the behavior of the carbonate system within estuarine environments;
- (2) the interactions of the carbonate system with other biotic and abiotic characteristics of estuarine ecosystems;
- (3) how environmental and anthropogenic changes or disturbances could affect abiotic and biotic processes within estuaries;
- (4) how estuarine biotic and abiotic processes will be affected under predicted environmental changes:
- (5) the current state of data collection, interpretation, storage, and retrieval and observational infrastructure of abiotic and biotic parameters in estuarine ecosystems:
- (6) the gaps that exist in understanding the socio-economic and health impacts of ocean acidification in estuaries;
- (7) future directions for scientific research; and
- (8) pathways for applying science in management and mitigation decisions.
- (c) REPORT.—In entering into an arrangement under subsection (a), the Secretary shall request that the National Academies transmit to Congress a report on the results of the study not later than 24 months after the date of enactment of this Act.

(d) AUTHORIZATION OF APPROPRIATIONS.— There are authorized to be appropriated to carry out this section \$1,000,000.

The SPEAKER pro tempore. Pursuant to the rule, the gentlewoman from Oregon (Ms. Bonamici) and the gentleman from Oklahoma (Mr. Lucas) each will control 20 minutes.

The Chair recognizes the gentle-woman from Oregon.

#### GENERAL LEAVE

Ms. BONAMICI. Mr. Speaker, I ask unanimous consent that all Members may have 5 legislative days to revise and extend their remarks and to include extraneous material on H.R. 2533, the bill now under consideration.

The SPEAKER pro tempore. Is there objection to the request of the gentle-woman from Oregon?

There was no objection.

Ms. BONAMICI. Mr. Speaker, I yield myself such time as I may consume.

Mr. Speaker, I rise today in support of Congressman Posey's National Estuaries and Acidification Research Act. I am an original cosponsor of this bipartisan bill, which would direct the National Academies of Sciences, Engineering, and Medicine to conduct a study that examines the science of ocean and coastal acidification in estuaries and provide recommendations to improve future research and management to inform mitigation decisions.

As co-chair of both the House Oceans Caucus and Congressional Estuary Caucus, I know that acidification is not only affecting the open ocean, estuaries and nearshore waters are also absorbing tremendous amounts of carbon pollution and becoming more acidic.

Our understanding of ocean acidification and its interactions with other environmental stressors, such as hypoxia, harmful algal blooms, and warming waters, is rapidly evolving, but is still limited in scope.

Ocean and coastal acidification are often present in the context of other coastal processes, like runoff, erosion, and upwelled water from the oceans, making it difficult to measure its individual effects on estuaries.

Our estuaries and nearshore waters are also experiencing the consequences of our inaction to address the climate crisis, and research has not kept pace with the needs of coastal communities. The NEAR Act will help address significant research gaps and the urgent need to improve our understanding of the ecological and socioeconomic effects of ocean and coastal acidification.

I thank Congressman Posey for his leadership on this bipartisan bill and his efforts to preserve our Nation's estuaries. I also thank Chairwoman Johnson and Ranking Member Lucas for making this bill a priority.

Mr. Speaker, I urge my colleagues to support it, and I reserve the balance of my time.